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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,084	09/26/2003	Iosif R. Korsunsky		7064

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EXAMINER

LE, THANH TAM T

ART UNIT PAPER NUMBER

2839

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,084

Applicant(s)

KORSUNSKY ET AL.

Examiner

Thanh-Tam T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-21 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/26/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7-17 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Takada et al. (6,341,966).

Regarding claims 1, 8-10 and 16, Takada et al., figures 2-5 disclose an extender for use between two connectors (10), comprising:

- a frame (40) having a body portion and two receiving ports (43) at opposite ends thereof adapted for respectively receiving the two connectors; and
- two circuit boards (20) attached to opposite sides of the body portion of the frame, the circuit board having conductive trace (20 and 21) disposed along at least one side and opposite end portions respectively extending into the two receiving ports of the frame.

Regarding claim 2, the two receiving ports are substantially identical.

Regarding claims 3 and 12, figure 2, the frame comprising two side portions on opposite sides, each side portion having two receiving sections at the same end of the frame defining the receiving port.

Regarding claims 4 and 13, figures 3 and 4, the circuit board comprising a pair of

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shoulders (tapered surfaces) on opposite sides of each end portion, each shoulder abutting against the bottom of a corresponding receiving section of the frame.

Regarding claims 5 and 14, figures 4 and 5, a protrusion (41) is provided in each receiving section of the frame adapted for engagement with a corresponding groove of the connector.

Regarding claims 7 and 15, the conductive traces of the circuit board including a plurality of signal and ground traces (20 and 21).

Regarding claim 11, the first and second connectors are identical.

Regarding claim 17, figure 5, the first and second contacts of the respective first and second connectors including signal and ground contacts arranged in four rows, the signal contacts being arranged in two outer rows and the ground contacts being arranged in two inner rows, the ground contacts having tail portions in a same cross-section of the connector abutting against each other.

Regarding claim 20, figure 5, an electrical system comprising:

- An insulative housing (10) defining two parallel slots along a longitudinal direction;
- Two rows of passageways located by two sides of each of the slots;
- Inner and outer rows of contacts (14 and 15) disposed in the corresponding passageways by two sides of each of the slots;
- the contacts disposed in one inner row and those corresponding ones in another inner row being mechanically and electrically engaged with each other in a transverse direction perpendicular to the longitudinal direction;

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- two spaced circuit boards (20) respectively downwardly inserted into the corresponding slots and electrically and mechanically engaged with the corresponding contacts;
- wherein each of the circuit boards including an outer face outwardly exposed to an exterior in the transverse direction; and an inner face supportably abutting against a body portion of a frame (40), the body portion being sandwiched between the two circuit boards.

Regarding claim 21, the frame is fastened to a printed circuit board on which the housing is mounted (by a protrusion 44).

3. Claims 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ramirez et al. (5,800,186).

Ramirez et al., figure 1, disclose an electrical connector comprising:

- a first connector (4) mounted on a first printed circuit board (2), the first connector having a first slot and a plurality of first contacts (60) disposed proximate to the first slot.
- a second connector (5) mounted on a second printed circuit board (3), the second connector having a second slot and a plurality of second contacts (40) disposed proximate to the second slot; and
- an extender (6) located between the first and second connectors, the extender comprising a frame (an insulator) and circuit board (circuit traces) attached to the frame, the circuit board having opposite end portions respectively extending into the first and second slots to allow conductive

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traces disposed thereon to electrically connect with corresponding first and second contacts.

Regarding claim 19, at least one end of the extender is attached to one of the first and second PCBs.

Allowable Subject Matter

4. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is an examiner's statement of reasons for allowance:

None of the reference discloses a pair of mounting legs is provided at opposite sides of one receiving port adapted for being mounted on a printed circuit board.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

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8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL.
9/26/04.



T. Le